Appl. No. To be assigned; Group Art Unit: To be assigned; Dkt. No. 1488.0880003/EKS/PSC; Inventors: Duan et al.; Tel: 202/371-2600; Title: Antibodies Directed to ELL2, a New Member of an ELL Family of RNA Polymerase II Elongation Factors (As amended herein);

. 1	CA	GTG(	GCG(	GCG( -+-	GGT(	GCA	GAA +			GCA					TGG	AGG	CTA +	GAG	CCG	GAGC	60
61	GG(	CGG(	CGG(	CGG(	CGG	CAC	CCC	GGG 	GAG	GTT	TAA +			GGC			GAC	<del>-</del>	GGG	CCTG	120
121	CG	GGA	GGA	GCA	GÇG	CTA	TGG	GCT	GTC	GTG	CGG	M ACG	A GCT	A GGG	G GCA					L CGTA	100
121	R	E	E	Q	R	Υ	G	L	S	С	G	R	L	G	Q	D	N	I	T	+ V	180
181	CT	GCA	TGT	GAA(																CAAG	240
	L	Н	٧	K	L	T	E	T		I						Υ	Q	S	Н		
241	AA`	TTT.	AAT 	TCC	TT	TCG.	ACC													AATT +	300
	N	L		Р	F	R	Р	Ş	I	Q	F	Q	G	L	Н	G	L	V		I	
301				-+-			+				+						+			GGGC +	360
	•	K ACA	N	D D	P	L	N	E	V T04	Н	N art	F	N	F	Y	L	S	N	V 	G	
361				-+- P						'	+			<b>-</b> + -			+	- <b>-</b> -		AGCC	420
		_			•						I AGA	Q TAA	Q aat	T TAC	F AGT	S ctc	S	S ^^C	-	A CGAC	
421	S	0		-+- N																+ D	480
		•	- TCA			- ACG				•			-	•	-			•	• • •	AAGC	
481		 Y												-+- E	 E	 S	+ R	 N	 R	+	540
	AC		AGT	TAT	CAA	ACC	CGG	TGG	ACC	ATA	TGT	AGG	GAA	AAG	AGT	GCA	AAT	TCG	GAA	AGCA	
541																			 K	+ A	600
601		TCA	AGC <sup>*</sup>	TGT	TTC	AGA	TAC	AGT	тсс	TGA	GAG	GAA	AAG	GTC	AAC	ССС	CAT	GAA	CCC	TGCA	
601		Q	Α	٧	S	D	+ T	V	 Р	E	+ R	K	R	-+- S	T	- <u>-</u> -	+ M	 N	P	+ A	660
661					AAA	ĢAC	ACA	TAG	CAG	CAG	CAC	CAT	стс	TCA	GAG	GCC	ATA	CAG	GGA	CAGG	700
001					K	T	Н	S	S	S	† T	I	S	Q	R	P	Υ	R	D	+ R	720
721				CTT.																CCAG	700
, _ 1																				0	780

FIG.1A



Appl. No. To be assigned; ; Group Art Unit: To be assigned; Dkt. No. 1488.0880003/EKS/PSC; Inventors: Duan et al.; Tel: 202/371-2600; Title: Antibodies Directed to ELL2, a New Member of an ELL Family of RNA Polymerase II Elongation Factors (As amended herein);

781	AAA	\GA7	GGI	GIC	TAA:	UPV-	·-+-	IGAL	,AA	+	}		·	1467 -+	V		+		·	+	840
701	K	D	G	V	N	Q	K .	D	K	N	S	L	G	Α	I	L	Q	Q	٧	Α	040
0.41	AA1	ГСТО	FAAE	TCT	TAA(	GAC	CTC	CTCA	ATA	TAC	CTT/	<b>4</b> AA(	GGA <sup>-</sup>	TAT	GT	ПТ	TAA	4GA(	GCTT	CAA	900
841	N	L	N	S	K	D	L	S	Υ	T	L	K	D	Υ	٧	F	K	Ε	L	Q	300
001	AGA	AGA(	CTGG	GCC7	rgg/	ATA(	CAGT	ΓGΑ	<b>4A</b> T.	AGA	CAG	ACG(	GTC	ATT(	GGA	GTC	AGŢ	GCT	CTC	ΓAGA	060
901	R	D	W	P	G	Υ	S	E	I	D	R	R	S	L	E	S.	٧	L	S	R	960
061	AA	ACT	444	TCCC	GTC	TCA	GAAT	rgc	TAC	AGG	CAC	CAG	CCG	TŢC	٩GA	ATC	TCÇ	TGT	ATG	гтст	1000
961	K	L	N	-+-· P	S	Q	N	A	T	G	† T	S	R	-+- S	E	S	P+	٧	C	S	1020
	AG	TAG	AGA <sup>-</sup>	TGC	TGT	ATC	TTC	TCC	TCA	GAA	ACG	GCT	TTT	GGA <sup>-</sup>	TTC.	AGA	GTT	TAT	TGA	ГССТ	1000
1021	Š	R	D	-+- A	٧	S	+ S	 Р	Q	K	+ R	L	L	-+- D	S	E	+ F	Ī	D	P	1080
	TT	AAT	gaa <sup>-</sup>	TAA	<b>4</b> 44	AGC	CCG	4AT	ATC	TCA	CCT	GAC	GAA	CAG	AGT	ACC	ACC	AAC	ACT	<b>AAAT</b>	
1081	L	 М	 N	-+- K	ĸ		+ R	Ī	S	 Н	+ L		 N	-+- R	٧-	 Р	- <u>-</u> + P		L	+ N	1140
	GG	TCA	ПТ	gaa <sup>°</sup>	TCC	CAC	CAG	TGA	ΑΑΑ	ATC	GGC	TGC	AGG	CCT	CCC	ACT	GCC	CCC	TGC	GGCT	
1141	G -	 H	-i-	-+- N	 Р		+ S	 Е		S	+ A		G	-+- L	 Р	L	+ P	P		+ A	1200
	GC	TGC	CAT	CCC	CAC	CCC	TCC	ACC	GCT	GCC	TTC	CAAC	СТА	TCT	GCC	CAT	СТС	:ACA	TCC	TCCT	4000
1201	Ā	 A		-+- P	 Т	 Р	+ P	 Р	L	P	+ S	T	- <del>-</del> -	-+- L	 Р	Ī	+ S	Н	P	+ Р	1260
	CA	GAT	TGT	`AAA	TTC	TAA	стс	CAA	CTO	CCC	TAG	CAC	TCC	AGA	AGG	CCG	GGG	GAC	TCA	AGAC	4000
1261	Q	ī		-+-			+				.1.									+	1320
			٧	N	S	N	S	N	S	Р	S	T	P	-+- E	G	R	G	T	Q	D	
	0,	ACC	V TGT	N TGA	S .CAG	N TTT	S TAG	N TC#	Ū	•	S	T TAT	P	E TGA	_	•	G AGC/	T VAG/	Q ACAA	J	1000
1321	0,	ACC	V TGT V	TGA -+- D	S CAG  S	N TTT F	S TAG + S	N TCA Q	Ū	•	+	T FAT	P	TGA	_	•	G AGC/ Q	T VAGA D	Q ACAA K	J	1380
) and	L	P	V	D	S	F	+ S	Q	VAAV N	ACG/ D	-+ S	Ī	P CTA	E	GG/ D	ACCA Q	Q	D	K	ATAT	
1321 1381	L AC	Р	V	D GAC	S	F	+ S	Q	VAAV N	ACGA D	S	I CTG	P CTA Y	E	GG/ D	Q ACCA Q	Q	D AGT(	K	ATAT Y	1380 1440
1381	AC T	P CCTC	V CTAG	D GGAC	S TTC	F TC1	S GGA E	Q (AA(	N CCT	D TACGA	S CCCC P	I CTG(	P CTA Y GTT(	E CCGT V	GG/ D TC1	Q ACC/ Q AC	Q TAA/ K	D AGT( H	K GTCC P	ATAT Y	1440
) and	AC T	P CCTC	V CTAG R	D GGAC	S TTC	F TC1	S GGA E ATTO	Q AA( T	N CCT	TACC	S CCCC P ACA	I CTG( G	P CTA Y GTTC S	CCAA	GGA D TC1 L	Q TACT L	Q TAAA K AGT	AGTO C C	K GTCC P	ATAT Y CAAAG K WACAT	
1381 1441	AC T CC P	P CCTC S CTAT	V CTAG R	D GGAC T VAGA	S TTC S	F TCT L ACC/	GGA E ATTO	Q AA( T AA	N CCT L TGT	TACGA D TACG P CTCA	S CCCO P ACA/	I CTG( G AAA/ K	P CTA Y STTC S AGTC	CCAACCCAACCC	GGA D TCT L VAAA	Q TACT L AGA	Q TAAA K AGT(	AGTO C CTA	K GTCC P AAAA K	ATAT Y CAAAG K WACAT	1440 1500
1381	AC T CC P	P CCTC S CTAT	V TAG R TGGA	GAC T VAGA	S S S AAAA N	F TCT L ACC/	GGA E ATTO S	Q AA( T AA M	N CCTTL	TACGA P CTCA H	S CCCC P ACAA K ACA	I CTG( G AAA/ K	P TCTA Y STTC S SAGAGA	CCAACCTA	D TCT	Q Q TACTACTACTACTACTACTACTACTACTACTACTACTACT	Q FAAA K AGT( S	AGTO CTAA +	K GTCC P AAAA K AGG/	ATAT Y CAAAG K WACAT H WAGAT	1440
1381 1441	ACC P	P CCTC S CTAT M AGGA	V CTAG R R FGGA E AAAA	D GGAC T T AAGA E AGGA GAGA	S STTC S AAAAA N ACCA	F CTCT L ACCA H AAAT I AGG	S TGGA E ATTC S TAAA	Q AA(	NAAA N CCT L TGT S AGC	ACGA D TACC P CTCA H ACGA	S CCCCC P ACAV ACAV TAA	I G G AAAAA K TTGA	P CTAY Y STTC	E CCGTTV V CCCAACCTAT	D L L AAAA K E E GTC	Q Q TACTACAGA	Q TAAA K AGTO S AAAA K	AGT(CTA)	K ETCC P AAAA K AGG/	ATAT Y CAAAG K WACAT H WAGAT	1440 1500

FIG.1B

## Sheet 3 of 7

Appl. No. To be assigned; ; Group Art Unit: To be assigned; Dkt. No. 1488.0880003/EKS/PSC; Inventors: Duan et al.;; Tel: 202/371-2600; Title: Antibodies Directed to ELL2, a New Member of an ELL Family of RNA Polymerase II Elongation Factors (As amended herein);

		L	K	R	Ε	Ε	Ε	I	Α	K	L	N	N	S	S	P	N	S	S	G	G	
	1621	GT	TAA																		TTTG	1680
	1021	٧	K	E	D	С	T	Α	S	М	E	Р	S	A	I	E	L	P	D	Υ	L	1000
	1681	AT.	AAA	ATA	TAT	CGC															CAAT	1740
	1001	I	K	Υ	I	Α	I	V	S			Q	R	Q	N	Υ	K	D	D	F	N	1740
ı	1741	GC	AGA	GTA	TGA	TGA	GTA	CAG	AGC	TTT(	GCA	TGC	CAG	GAT	GGA	GAC	TGT	AGC	TAG	4AG	ATTT	1800
	1/41	Α	E	Υ	D	Ε	Υ	R	Α	L	Н	Α	R	M	Ė	T	٧	Α	R	R	F	1000
	1801	AT	CAA	ACT	AGA	TGC	ACA	AAG	<b>AA</b> A	GCG	CCT	TTC	TCC	AGG	CTC	AAA 	AGA	GTA	TCA	GAA	TGTT	1860
4 4mr m	1001	I	K	L	D	Α	Q	R	K	R	L	S	P.	G	S	K	E	Υ	Q	N	٧	1000
ž	1861	CA	TGA	AGA	AGT	CTT	ACA	AGA	ATA	TCA	GAA	GAT.	<b>A</b> AA	GCA	GTC -+-	TAG	TCC	CAA +	TTA	CCA	TGAA	1920
, m,	1001	Н	Ε	Ε	٧	L	Q	Ε	Υ	Q	K	I	K	Q	S	S	P	N	Υ	Н	E	1520
	1921		<b>A</b> AA 	ATA	CAG	ATG	TGA	ATA +	TCT	TCA	TAA	CAA +	GCT	GGC	TCA	CAT	CAA	AAG	GCT	AAT	AGGT	1980
- <u>}</u>		Ε	K	Y	R	С	Ε	Υ	L	Ή	N	K	L	Α	Н	I	K	R	L	Ι	G	
	1981						GCA														ATGT	2040
		E	F	D	Q	Q	Q	A	Ε	S	W	S	*									
	2041		ATA	VAAC	TTA -+-	AGC		TTT	AT1	TAA	AAT 	TCC +	<b>.</b>	ATGA	AGTT +-	GCT	CTA	GAT +	TCT	`AAA	AAGG	2100
	2101		AAA 	ACTT	FTG0	CTC	GTTG	<del>-</del>	\GT1	TCA	GTA	ATT. +	GTA	VAA(	T -	21	.39					

FIG.1C

Appl. No. To be assigned; Group Art Unit: To be assigned; Dkt. No. 1488.0880003/EKS/PSC; Inventors: Duan et al.;; Tel: 202/371-2600; Title: Antibodies Directed to ELL2, a New Member of an ELL Family of RNA Polymerase II Elongation Factors (As amended herein);

ELL2 ELL	maaggtGGLREEGRYGLSCGRLggd-NITVLHVKLTETAIRALEITMOSHKNLIPFRPSIGFQGLHGLMKIIPKNDPLNEVH mAA <u>LKEDR</u> SYG <u>LSGGRV</u> SdgskNSVFHVKLTDSAIRAFESYRARQDSWSLRPSIRFQGSQGHISIPQPDCPAEAR	79
ELL2	NFNFYLSNWGKDNPRGSFDCIIQQTFSSSGASQLNCUGFIIRDKITVCATNDSYOMTRERMTOAEEEISRNRSTKVIKPGGPY	159
ELL	TESFYLSNIGRDNPRGSFDCIIQQYVSSHGEVHLDQUGSIIRDKITVCATDDSYOKAROSMADAEEEIRSRSAIVIKAGGRY	155
ELL2	VICKRVOIRKAPOAVSIDTVPERKRSTPMNPANTIRKTHSSSTTISORPYRDRVIHLLALKAMKKPELLIARLOKDGVN	234
ELL	LICKKVOFRKPAPGATDAMPSRKRATPIINLASAIRKSGASAVSGSGVSORPYRDRVIHLLALRPMRKAELLIRLOKDGLT	235
ELL2	OKDKNSLGAILDOVANLNSKDLSYFLKDYVFKELORDWPGYSEIDRRSLESVLSRKLMpsqnatGTSRSESPVCSSR	311
ELL	OADKDALDGILDOOVANMSAKDGICTLODCMYKDWOKDWPGYSEGDOOLLKRVLVRKLC9pgstgsliGDPAASSPPGERG	315
ELL2	DAVSSPOKRILLDSEFIJDPLMNKKARIISHLTNRVPPTILNGALNO tseRsdaglplpdaga iptpplpstylpishppgi	391
ELL	RSASPOKRLOPPLFIJDPLANKKPRIISHFIORAQPANNCKLgvpngredllptpgppgstatlsssthlpprleppraMd	395
ELL2	vnsnsnspstpelgngtdalpvolsfisqndslilyedqqdkytsrtsletlppgslVLLkOPKPMEENHSMSHKKSKKKSKKHKE	471
ELL	pladvsnalghsgndcehgeaalpbptvrllglpLLTDCAQPSRPHGSPSRSKPKKKKKKHKD	457
ELL2	KDQ;kKhd;et;eekeed(kreee;ak (MnssphssggvkedcTASMEPSAIELPDYLIKM1AIVSYEaranMKDDFNAE	551
ELL	KERaaedkpraq(pdcapathatpgapadtpg(MgtcsVSSVPTSTSETPDYLLKMAAISSSEaraSMKNDFNAE	532
ELL2	MDE YRALHARMETMARRFIKLIDAGRKRL SPGSKE YGNVHEEVLOE YOK IKOSSPNYHEEKYRCE YLHNKLAHIKRLIGEF	631
ELL	YSE YRDLHARIERITRRFTOLDAGLROL SOGSEEYET TRGOILGEYRK IKKTNTNYSGEKHRCE YLHSKLAHIKRLIAEY	612
ELL2	DAGARESIWS	640
ELL	DARALAAMP	621

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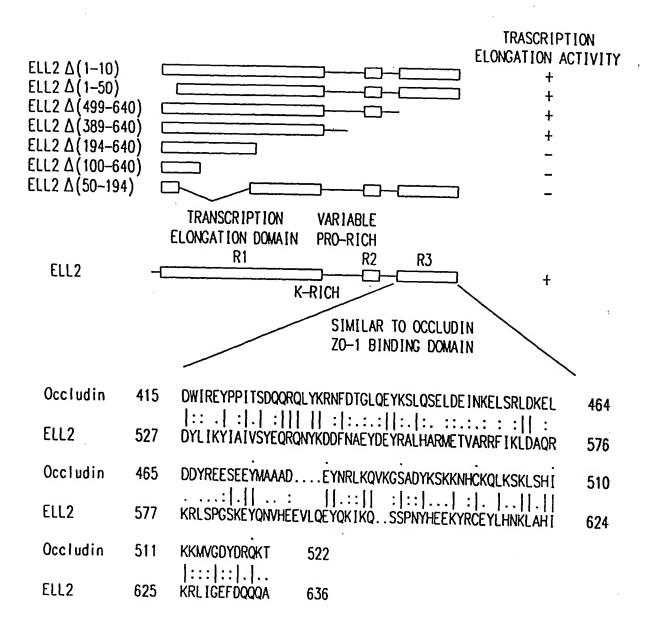


FIG. 3

and that that that the

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Appl. No. To be assigned; Group Art Unit: To be assigned; Dkt. No. 1488.0880003/EKS/PSC; Inventors: Duan et al.;; Tel: 202/371-2600; Title: Antibodies Directed to ELL2, a New Member of an ELL Family of RNA Polymerase II Elongation Factors (As amended herein);

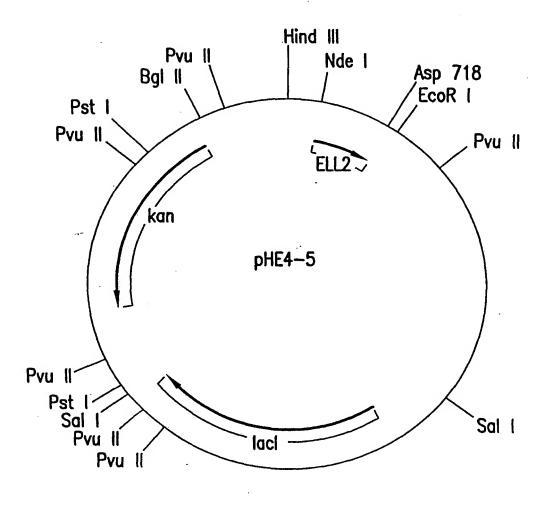


FIG. 4

Appl. No. To be assigned; ; Group Art Unit: To be assigned; Dkt. No. 1488.0880003/EKS/PSC; Inventors: Duan et al.;; Tel: 202/371-2600; Title: Antibodies Directed to ELL2, a New Member of an ELL Family of RNA Polymerase II Elongation Factors (As amended herein);

-35 Operator 1 AAGCTTAAAAAACTGCAAAAAATAGT[TTGACT[[6]66666666464]

50 TAAGATGTACCCAATTGTGTGAGGGGATAAGAATITTC S/D

94

FIG. 5